

### UTAH LAKE AS A RESERVOIR

One of the first questions put before Mr. E. S. Borgquist by the State Engineer was "Is Utah Lake a storage reservoir?".

This is a controversial question. If one were to ask this question of any one of the canal presidents of the Jordan River canals, the answer would likely be, "Yes indeed. It has always been a reservoir, and we have court decrees to prove it".

On the other hand, if one were to ask the same question of any one of the canal presidents of the Provo River canals, the answer would likely be, "No indeed. All of the water to which the Jordan River canals are entitled is the number of second feet they can use beneficially each year in their canals".

Thus, there are two entirely different viewpoints, depending upon where the "water user" lives and where he gets his water.

In studying the court decrees and reports pertinent to Utah Lake, ~~the Borgquist~~ has kept this question of storage in the foreground, and has underlined in the decrees and reports all references made to storage in the lake, with the thought that these references may help to answer the question.

The question of whether Utah Lake is a storage reservoir is indeed a "moot" question. When the case comes up, it will likely be argued for both ways. Only a court can ever answer the question. It should be considered as a separate issue in the Utah Lake-Jordan River controversy and settled by the court at any early date.

Mr. Edward Clyde, of the Attorney General's office, has been trying to get the attorneys of the several canal companies to agree on a "method of procedure" to settle this question of "storage rights" as a separate issue. It may be possible to get this question settled during the coming fall and winter.

There are certain phases of the question which may well be reviewed here in order to get a broader view of the whole problem.

About the earliest reference in a public document to this problem of storage is given in Bulletin No. 124 published by the U. S. Department of Agriculture in 1903.

Briefly stated, the early problem was this: The Jordan River canals depended upon a considerable depth in Utah Lake above the level of the bottom of the river at the outlet of the lake, frequently referred to as "the low water mark", in order to get sufficient gravity flow in the river to irrigate their lands.

The raising of the water in the lake, on the other hand, flooded the lands of the property owners adjacent to the lake thereby causing damage.

The bulletin above referred to, on page 63, describes the early condition as follows:

#### Right to the Use of Utah Lake as a Reservoir

"As Utah Lake is the sole source of water for Jordan River, the use of that river for irrigation has inevitably brought up the question of storing water in the lake. The law incorporating the Deseret Irrigation Company, passed in 1867, authorized that company to construct dams in the river to hold the water of Utah Lake at any height that a majority of the selectmen of Great Salt Lake and Utah Counties might agree upon. From that time to the present it has been held by all concerned that the height to which the water may be raised is a matter of agreement. The first dam in Jordan River for the purpose of holding back the water of the lake was built by Salt Lake County in 1872. The next spring water was high in the lake, and the county court of Utah County at once communicated with the county court of Salt Lake County, suggesting that the members of the courts of the two counties meet and consider what should be done in the matter. No agreement was reached, and as a consequence 'the head gates washed out, being helped by persons unknown,' as the record of the county court of Salt Lake County expressed it. This was in the winter of 1873-74. The dam was rebuilt the following spring. In the meantime the people of Utah County continued to complain of high water, claiming that it was caused by the dam in the river, while the county court of Salt Lake County proceeded to investigate the effect of the dam on the level of the lake. Their investigation proved to the satisfaction of those making it that the dam had no effect on the lake.

"In the fall of 1876 the people of Utah County made an investigation of their own, and found that the dam had raised the water in the lake 5 feet. These results were reported to the Salt Lake County court, and it in turn ordered a new investigation. This investigation is summed up as follows by the court:

The rise of the water occasioned by said dam has been carefully ascertained by scientific and actual tests, and it does truly appear that the dam erected and as it now is does not raise the water any at the outlet of Utah Lake.

"Notwithstanding this diversity of opinion an agreement was entered into to remove so much of the dam as would permit the waters of the Jordan to flow naturally at the Indian Ford Riffle, above the dam. This agreement seems to have been lived up to until 1880, when the county court of Salt Lake County appointed a committee to 'ascertain by actual measurement how much higher, if any, the water in said lake can be raised without material injury to the owners of land along the

shores of said lake'. This committee made its investigation, and reported that to hold the water at the height reached in June, 1880, 3 feet below the high-water mark of 1862, would materially injure but few, if any, of the owners of the land along the lake. The dam was accordingly raised, and this action aroused renewed protests from Utah County. A mass meeting was held in Provo June 25, 1881, when the following resolution was adopted:

Be it resolved, That we decline to refer the matters in dispute to the arbitrament of the county courts of Utah and Salt Lake counties, but insist upon the compliance on the part of Salt Lake County, or whoever may be interested in the Jordan Dam, with the agreement to restore the riffle at the Indian Ford to its natural condition, and that in the event that the parties controlling said dam fail to commence to remove the obstructions in the Jordan in compliance with said agreement by the 15th day of July, 1881, and to prosecute said labor in good faith, that we proceed ourselves to remove so much of the dam as will be a substantial enforcement of said agreement.

"The press reports of the meeting stated that an assessment was levied on those claiming to be damaged, of 1 per cent of the damage claimed, to fight the case.

"In the spring of 1882, Utah County again employed an agent to investigate the effect of the dam. The agent reported that the dam set the water back only so far as the Indian Ford. In 1884, the whole subject was referred to an arbitration committee of prominent citizens, who took testimony and proposed a compromise agreement, which was adopted and is still in force. The parties to the agreement are, on the one side, the owners of land bordering the lake, and on the other side Salt Lake County, Salt Lake City, the Utah and Salt Lake, the South Jordan, the North Jordan, and the East Jordan canal companies.

"This agreement provided that the water of Utah Lake might be held at a height 'not to exceed 3 feet and  $3\frac{1}{2}$  inches above the point heretofore established and recognized as low-water mark'. It also provided for a board of five persons to carry out the agreement and decide when obstructions should be placed in the river or be removed, in order that the water might not rise higher than 'compromise point,' and also for the dredging of the river so that the lake could be drawn down to a lower level than was possible under existing conditions.

"The commissioners provided for in this agreement were appointed and proceeded to erect a monument to mark the level at which the water might be held without liability for damage. This level has since been known as 'compromise level'. In 1888, 1889, and 1890, the city and canal companies carried out the plan of dredging suggested in the agreement. The river was dredged from the outlet of the lake to a point about a mile above the old dam. At this point a new dam was

built to control the outflow from the lake. It is a timber structure, with uprights between which planks are inserted when it is desired to hold up the water. The dredging enables the companies to draw off the water of the lake some 14 inches lower than it could be drawn before, adding in this way 14 inches in depth over the entire lake to the available water which they can hold in the lake before it is necessary to open the waterway to dispose of flood water. Having done this dredging, the companies claimed the right to maintain planks in the new dam to the same extent that they had lowered the bed of the river, regardless of the compromise agreement and regardless of the action of the Utah Lake commission. This right was denied by the Utah County parties, and differences also arose as to the 'low-water mark' referred to in the compromise agreement, and as to the right of the companies or the commission to place planks in the dam between October 15 and March 15. These matters were adjudicated in the case of Salt Lake City v. Colladge. (13 Utah, p. 522) The court held in that case that the canal companies had the right to maintain 22 inches of planks in the new dam at all seasons of the year without any action of the Utah Lake commission; that the commission might place planks in the dam above this 22 inches between October 15 and March 15; and established compromise level, or the height to which water might be raised, as '4 feet, 6 inches below the top of the stone monument at the outlet of the lake, which was established by the Utah Lake commission in 1885'.

"This compromise agreement, as interpreted by the court in the above case, is still in force, and was recognized in the recent adjudication of rights to Jordan River, where the court held:

That, subject to these limitations (expressed in the preceding part of the decision) and to the limitations contained in the agreement of compromise entered into in 1885 between Joseph H. Colladge and others and said city and canal and irrigation companies, the said city and canal and irrigation companies have the right at all times to shut off, impound, and store the entire flow of the Jordan River and hold and save the same for future use to the extent which, in their judgment, their interests may require."

In reviewing the above article, as well as the complete Colladge Decree, it is seen that the primary problem is not the amount of storage to be provided for the Jordan River canals, but is the height to which the lake level might be raised without causing undue damage.

The Colladge Decree states that the Jordan River canals paid \$8000 to the land owners adjacent to Utah Lake as damages that had been caused to their lands. The agreement entered into upon the payment of this \$8000 gave the Jordan River canals the right to maintain a dam in the river and to hold the lake level up to "Compromise Level".

The problem of storage cannot be separated from the problem of raising the lake level to a certain height, because, while the property owners along Utah Lake are interested only in seeing that the lake level should not be raised higher than compromise level, the Jordan River canals are looking at the matter from the other viewpoint of storing

all possible water between the "low water level" and the "Compromise Point". It can safely be said, then, that the Collage Decree does provide for a limited amount of storage between "low water level" and "Compromise Point".

The court decree, however, limits this storage right very definitely by providing that the planks placed on the sill of the dam must be removed by the Utah Lake Commission on the 1st of October and the water be allowed to "run free" between October 1st and March 15th of each year.

The decree, as corrected by the State Supreme Court, provided further that in case of a year of light snowfall, the planks might be placed on the sill of the dam earlier than March 15th.

Right here provision was made by the Court for storing and holding the water back in Utah Lake.

The lake, thereby, became legally a storage reservoir to a limited extent. The fact that the Utah Lake Commission followed the instructions of the court year after year, and placed planks on the sill of the dam to hold back the water in storage during years when the lake was low, established for the Jordan River canals a storage right in Utah Lake by "diligence of use" years before the State Engineer's office was established.

The Collage Decree further recognized that dredging had been done in the river which should have allowed the lake to be lowered a depth of 22 inches over its entire surface. If this lowering had been done by the dredging as provided in the decree, it would have granted additional storage right in the lake to the Jordan River canals.

The facts in the case are, however, that the low water point in the lake was controlled by the rock ledge at the Indian Ford dam. It has been established, by statements from William A. Knight and Joseph A. Hibbard, that it never was possible to lower the lake this 22 inches which the Court decrees allowed, on account of this ledge across the bottom of the river at the old Indian Ford.

Actually the lake never was lowered below the "low water point" as established in the early Collage Decree until the pumps were installed in 1902.

The court had authorized the lowering of the lake by this 22 inches and records show that in 1902, the year the pumps were installed, the lake was lowered to a point about 4.2 feet below compromise, and in 1905, according to the testimony of Mr. William A. Knight, the lake was lowered to a depth of 5.6 feet below compromise. Thus we see, even at that early date, the lake had been lowered the

full 3 feet  $3\frac{1}{2}$  inches (3.30 feet) plus 21 inches (1.75 feet) amounting to 5.05 feet. Thus, by 1905 the lake had been lowered the full 22 inches allowed for dredging, lacking 1 inch, that is, the lake had been lowered 21 inches below "lower water point".

Looked at in another way, the Jordan River canals had perfected their right as established in the second filing made with Utah County which provided for lowering the level of the lake "to  $1\frac{1}{2}$  feet below low water mark" by pumping.

At later dates in the history of the operation of Utah Lake, there have been times when the lake was pumped even to a lower level. Records show that in 1911 the lake was lowered to about 3.2 below compromise; in 1912, to about 3 feet below compromise; in 1919, to about 4.2 below compromise; and after 1924 until the present date, the lake never has risen to compromise level.

The low point in this latter cycle occurred during the drouth of 1934 and 1935 when the lake was pumped to the extremely low level of about 12 feet below compromise. Since that date, the lake has been filling gradually at the rate of about 1 or 2 feet a year, but if it had not been for "storage water" in the lake used below the low water point, there would have been almost no water used by the Jordan River canals from 1925 to 1945, inclusive, a total period of some twenty years.

Under the "Lambert Filing" made on July 28, 1902, it was proposed to divert 1000 second feet of the unappropriated waters of Utah "by means of pumps" and to "lower the water of Utah Lake to a point 7.5 feet below what is known as Compromise Level".

This water right was conveyed to the Utah and Salt Lake Canal Company, the East Jordan Canal Company, and the South Jordan Canal Company by warranty deed, recorded August 25, 1902, in Book 59, page 342.

These last three named canals claim that by virtue of this filing made with the county recorder of Salt Lake County before the office of the State Engineer was established in 1903, they are fully protected in their pumping rights, the pumps having been installed in 1902.

They feel that they have perfected their title by pumping as provided for in this "Lambert Filing". It is true that they never have enlarged the East Jordan Canal to a capacity of 600 second feet as proposed in the filing, and have never extended canals into Davis and Tooele County as proposed, but in the matter of installation of pumps, they have accomplished the purpose of the filing and have thereby perfected their title to that extent.

And while it is true that the Colladge Decree is not binding on persons except those party to the suit, still the Colladge Decree does make a matter of record what was being done by way of storage in Utah Lake, the method used in placing "planks on the sill of the dam", etc., and shows that by such action the Jordan River canals were establishing "diligence rights" by use.

It is the opinion of Mr. Borgquist that the Jordan River canals have established such "diligence rights" to a limited amount of storage in Utah Lake, at least to the amount of the 3 feet  $3\frac{1}{8}$  inches between the "low water level" and "Compromise Point", plus the 22 inches provided for in the Colladge Decree, both of which were perfected in title "by use" before the State Engineer's office was established in 1903.

The court may recognize such rights and define them more definitely as to amount and as to date of priority when the Tamar Anderson suit comes up for adjudication.